

TKPP**SECTION 1. IDENTIFICATION**

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| Product Identifier | TKPP |
| Other Means of Identification | Tetrapotassium Pyrophosphate |
| Product Family | Deflocculant / Dispersant |
| Recommended Use | Drilling Fluid Additive. |
| Supplier Identifier | Bri-Chem Supply Ltd., Bay 4, 5510 - 3rd Street SE, Calgary, Alberta, T2H 1J9, Bri-Chem Supply, 403-252-5904, www.brichemsupply.com |
| Emergency Phone No. | ChemTrec, (800) 424-9300, 24/7 |

SECTION 2. HAZARD IDENTIFICATION**Classification**

Acute toxicity (Oral) - Category 4; Acute toxicity (Inhalation) - Category 4; Skin irritation - Category 2; Eye irritation - Category 2A

Label Elements

Signal Word:

WARNING!

Hazard Statement(s):

Harmful if swallowed.

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

Precautionary Statement(s):

Prevention:

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear eye protection/face protection.

Wear protective gloves.

Response:

IF ON SKIN: Wash with plenty of water.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If skin irritation occurs: Get medical advice or attention.

If eye irritation persists: Get medical advice or attention.

Take off contaminated clothing and wash it before reuse.

Disposal:

Dispose of contents and container in accordance with local, regional, national and international regulations.

Product Identifier: TKPP

Date of Preparation: March 07, 2016

Page 01 of 05

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | % | Other Identifiers |
|------------------------------|-----------|-----|-------------------|
| Tetrapotassium pyrophosphate | 7320-34-5 | 100 | |

SECTION 4. FIRST-AID MEASURES

First-aid Measures

Inhalation

Remove from exposure to fresh air immediately. Apply oxygen or artificial respiration if required. Get medical attention immediately.

Skin Contact

Wash gently and thoroughly with lukewarm, gently flowing water and non-abrasive soap. If irritation persists, seek medical attention.

Eye Contact

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water while holding the eyelid(s) open for 15 minutes. If adverse symptoms develop, seek medical attention.

Ingestion

If patient is conscious and alert, give 2 or more glasses of water to drink. Get medical attention.

First-aid Comments

All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

SECTION 5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media

Dry chemical, carbon dioxide, foam, water.

Specific Hazards Arising from the Product

Non-flammable.

Special Protective Equipment and Precautions for Fire-fighters

Must wear NIOSH-approved self-contained breathing apparatus and other protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

Environmental Precautions

It is good practice to prevent releases into the environment. Do not allow into any sewer, on the ground or into any waterway.

Methods and Materials for Containment and Cleaning Up

Use appropriate safety equipment. Small spill: sweep up and put into approved DOT containers for disposal or re-use. Large spill: DO NOT allow to enter sewers, storm drains, surface waters or soil; sweep up or shovel into approved DOT containers for disposal or re-use.

SECTION 7. HANDLING AND STORAGE

Precautions for Safe Handling

Avoid ingestion. Avoid contact with skin and eyes. Practice reasonable caution and personal cleanliness. Prevent dust accumulation on ALL surfaces including ceiling rafters and other hidden surfaces.

It is good practice to: avoid breathing product; avoid skin and eye contact and wash hands after handling.

Conditions for Safe Storage

Product Identifier: TKPP

Date of Preparation: March 07, 2016

Page 02 of 05

Store in a cool, dry, well-ventilated place. Keep container tightly closed and away from incompatible materials. Empty containers contain residual materials and must be handled with the same care and attention as if full.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits: LD50 Mouse: 2000 mg/kg.

Appropriate Engineering Controls

None required for normal use.

Individual Protection Measures

Eye/Face Protection

Wear chemical safety goggles.

Skin Protection

Wear chemical protective clothing e.g. gloves, aprons and boots.

Respiratory Protection

In absence of proper ventilation, recommend NIOSH-approved dust respirator.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties

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|---|--|
| Appearance | White Granules. Particle Size: Not available |
| Odour | Odourless |
| Odour Threshold | Not available |
| pH | 10.2 - 10.7 (1% solution) |
| Melting Point/Freezing Point | Not available (melting); Not available (freezing) |
| Initial Boiling Point/Range | Not available |
| Flash Point | Not applicable |
| Evaporation Rate | Not applicable |
| Upper/Lower Flammability or Explosive Limit | Not available (upper); Not available (lower) |
| Vapour Pressure | Not available |
| Vapour Density (air = 1) | Not applicable |
| Relative Density (water = 1) | Not available |
| Solubility | Soluble in water; Not available (in other liquids) |
| Partition Coefficient, n-Octanol/Water (Log Kow) | Not applicable |
| Auto-ignition Temperature | Not available |
| Decomposition Temperature | 850 °C |
| Viscosity | Not available (kinematic) |
| Other Information | |
| Physical State | Solid |
| Molecular Formula | Not available |
| Molecular Weight | Not available |
| Bulk Density | Not available |
| Surface Tension | Not applicable |
| Critical Temperature | Not applicable |
| Electrical Conductivity | Not available |
| Vapour Pressure at 50 deg C | Not available |
| Saturated Vapour Concentration | Not available |

Product Identifier: TKPP

Date of Preparation: March 07, 2016

Page 03 of 05

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability

Normally stable.

Possibility of Hazardous Reactions

Hazardous polymerization will not occur.

Conditions to Avoid

None known.

Hazardous Decomposition Products

None known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Toxicity

LD50 Oral Rat: >2000 mg/kg

Skin Corrosion/Irritation

Causes skin irritation, sharp pain. Prolonged contact may cause drying or chapping of the skin.

Serious Eye Damage/Irritation

Causes eye irritation, possible blurred vision.

STOT (Specific Target Organ Toxicity) - Single Exposure

Inhalation

Dust may be irritating to the nose, throat and respiratory tract. May cause shortness of breath.

Ingestion

May cause stomach ache, nausea and vomiting.

May cause gastro-intestinal irritation. Following repeated exposure (13 weeks) in food, kidney damage with changes in body weight, food consumption, clinical parameters and organ weights were reported at high dose levels in rats.

No information was located for: STOT (Specific Target Organ Toxicity) - Repeated Exposure, Respiratory and/or Skin Sensitization, Carcinogenicity, Development of Offspring, Sexual Function and Fertility, Germ Cell Mutagenicity, Interactive Effects

SECTION 12. ECOLOGICAL INFORMATION

No ecotoxicity or environmental fate data available. It is good practice to prevent releases into the environment.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal Methods

Dispose of in accordance with federal, provincial and local government regulations. Containers should NOT be re-used. Containers should be disposed of in accordance with government guidelines.

SECTION 14. TRANSPORT INFORMATION

Not regulated under Canadian TDG regulations.

Special Precautions Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15. REGULATORY INFORMATION

Safety, Health and Environmental Regulations

Canada

Product Identifier: TKPP

Date of Preparation: March 07, 2016

Page 04 of 05

WHMIS 1988 Classification

Not a WHMIS controlled product.

Additional Canadian Regulatory Lists

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

SECTION 16. OTHER INFORMATION

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|----------------------------|---|
| SDS Prepared By | Bri-Chem Supply Ltd |
| Phone No. | (403) 252-5904 |
| Date of Preparation | March 07, 2016 |
| Disclaimer | This Health and Safety information is correct to the best of our knowledge and belief at the date of its publication, but we cannot accept liability for any loss, injury or damage which may result from its use. We shall ensure, so far as is reasonably practicable, that any revision of this Data Sheet is sent to all customers to whom we have directly supplied this substance, but must point out that it is the responsibility of any intermediate supplier to ensure that such revision is passed to the ultimate user. The information given in the Data Sheet is designed only as guidance for safe handling, storage, and the use of the substance. It is not a specification nor does it guarantee any specific properties. All chemicals should be handled only by competent personnel, within a controlled environment. Should further information be required, this can be obtained through the sales office whose address is at the top of this data sheet. |